IN THE SPECIFICATION:

Please amend the paragraph starting at page 1, line 15, and ending at line 27, as follows.

--As one of conventional approaches to correction ~~for~~ of chromatic aberration of the optical system composed of only refracting optics, there is a method of combining glass materials of different dispersion characteristics. For example, in the case of objectives of telescopes etc., axial chromatic aberration is corrected ~~for~~ by combining a positive lens of a low-dispersion glass material with a negative lens of a high-dispersion glass material. For this reason, there were cases where chromatic aberration was not corrected ~~for~~ adequately if the composition or the number of lenses was limited or if available glass materials were limited.--

Please amend the paragraph starting at page 2, line 23, and ending at line 27, as follows.

--Further, such diffracting optical element can be provided with an aspherical-lens-like effect by changing periods of the periodic structure of the diffraction grating and is thus greatly effective to ~~reduction of~~ reduce aberration.

Please amend the paragraph starting at page 3, line 6, and ending at line 19, as follows.

--When the diffracting optical element is used as a lens system, it is thus necessary to determine the grating structure so as to concentrate light of the used wavelength range into specific orders (which will also be referred to hereinafter as "designed orders") by adequately enhancing the diffraction efficiency of rays of the designed orders. When light is concentrated in the specific orders, the intensity of rays of diffracted light of the other orders is low. When the intensity is zero, diffracted light thereof appears null. If there exist rays of diffraction orders

other ~~then~~ than the designed orders, they will be focused at positions different from those of the rays of the designed orders and appear as flare light.--

Please amend the paragraph starting at page 4, line 9, and ending at line 27, as follows.

--In each of the diffracting optical elements described in Japanese Patent Application Laid-Open No. 9-127321 and Japanese Patent Application Laid-Open No. 11-44808, the combination of a relatively high-refraction low-dispersion material with a relatively low-refraction high-dispersion material is used in order to obtain the layout having the high diffraction efficiency in the wide wavelength range. Specifically, the materials used are as follows: BMS81 ($n_d = 1.64$, $\nu_d = 60.1$: available from Ohara Inc.) and the plastic optical material PC ($n_d = 1.58$, $\nu_d = 30.5$: available from Teijin Chemicals Ltd.), in the case of Japanese Patent Application Laid-Open No. 9-127321; and C001 ($n_d = 1.5250$, $\nu_d = 50.8$: available from Dainippon Ink and Chemicals, Inc.), the plastic optical material PC ($n_d = 1.58$, $\nu_d = 30.5$: available from Teijin Chemicals Ltd.), BMS81 ($n_d = 1.64$, $\nu_d = 60.1$: available from Ohara Inc.), etc., in the case of Japanese Patent Application Laid-Open No. 11-44808.

Please amend the paragraphs starting at page 10, line 10, and ending at page 12, line 27, as follows.

--A twenty-first aspect of the invention is the optical material of either one of the seventeenth to twentieth aspects wherein ~~said~~ the first material is polymethyl methacrylate.

A twenty-second aspect of the invention is the optical material of either one of the seventeenth to twenty-first aspects wherein ~~said~~ the first material is polymethyl methacrylate, ~~said~~ the second material is particles of ITO (indium-tin-oxide), and a weight ratio of the particles and ~~said~~ the polymethyl methacrylate is in the range of 30:100 to 250:100.

A twenty-third aspect of the invention is the optical material of either one of the seventeenth to twentieth aspects wherein ~~said~~ the first material is an amorphous polyolefin.

A twenty-fourth aspect of the invention is the optical material of either one of the seventeenth to twentieth aspects wherein ~~said~~ the first material is an amorphous polyolefin, ~~said~~ the second material is particles of ITO (indium-tin-oxide), and a weight ratio of the particles and ~~said~~ the amorphous polyolefin is in the range of 44:100 to 150:100.

A twenty-fifth aspect of the invention is the optical material of either one of the seventeenth to twentieth aspects wherein ~~said~~ the first material is a copolymer of methyl methacrylate and styrene.

A twenty-sixth aspect of the invention is the optical material of either one of the seventeenth to twentieth aspects wherein ~~said~~ the first material is a copolymer resin of methyl methacrylate and styrene, ~~said~~ the second material is particles of ITO (indium-tin-oxide), and a weight ratio of the particles and said copolymer resin is in the range of 43:100 to 140:100.

A twenty-seventh aspect of invention is an optical member comprising the optical material as set forth in either one of the first aspect to the twenty-sixth aspect.

A twenty-eighth aspect of the invention is an optical system comprising the optical member of the twenty-seventh aspect.

A twenty-ninth aspect of the invention is a diffracting optical element using the optical material as set forth in either one of the first aspect to the twenty-sixth aspect.

A thirtieth aspect of the invention is an optical system comprising the diffraction optical element of the twenty-ninth aspect.

A thirty-first aspect of the invention is an optical device comprising the optical system of the twenty-eighth aspect or the thirtieth aspect.

A thirty-second aspect of the invention is a method for producing an optical material, comprising a step of decreasing a filling factor of a first material, and a step of filling gaps of the first material of the decreased filling factor with a second material having an Abbe's number different from that of the first material, thereby producing an optical material having a desired refractive index and Abbe's number.

A thirty-third aspect of the invention is an optical member comprising the material produced by the production method as set forth in the thirty-second aspect.

A thirty-fourth aspect of the invention is an optical system comprising the optical member of the thirty-third aspect.

A thirty-fifth aspect of the invention is the optical system of the thirty-fourth aspect wherein ~~said~~ the optical member is a diffracting optical element.

A thirty-sixth aspect of the invention is an optical device comprising the optical system of the thirty-fourth aspect or the thirty-fifth aspect.--

Please amend the paragraphs starting at page 18, line 8, and ending at line 10, as follows.

--(2) guest-host-type mixing,

(3) main-chain-type mixing, and

(4) side-chain-type mixing.--

Please amend the paragraph starting at page 20, line 16, and ending at line 25, as follows.

--There are no specific restrictions on the material with large dispersion (i.e., with a small Abbe's number), but it is desirably particles of a composite metal oxide of titanium and silicon (Si_x-$Ti_{(1-x)}O_2$). The ratio of metals can be adjusted to an arbitrary value for the composite

metal oxide of titanium and silicon and it is thus easy to adjust the Abbe's number. The large-dispersion material used herein is ~~the~~ particles of the composite metal oxide of titanium and silicon adjusted to the Abbe's number (ν_d) of $24.5 \leq 25$.--

Please amend the paragraph starting at page 51, line 19, and ending at line 24, as follows.

--Each of the above examples permits attainment of the optical materials satisfying the region ($n_d \leq -6.667 \times 10^{-3} + 1.70$, $\nu_d \leq 40$) or ($n_d \leq -0.01\nu_d + 1.70$, $\nu_d \leq 40$) and being indispensable for performance enhancement of the refracting optical systems and stack optical elements, and the optical system using [[it]] <u>them</u>.--